

DESCRIPTION OF SOME NEW GENERA IN THE FAMILY CYNIPIDÆ.

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Subfamily iii ANACHARINÆ.

ACANTHAEGILIPS gen. nov.

This genus is based upon a single specimen in the Herbert Smith collection, taken by him at Chapada, Brazil. It is closely allied to *Xyalaspis* Hartig, and *Aegilips* Haliday, but is readily distinguished from both by the very large *erect* spined scutellum, the rugose mesonotum which is without parapsidal furrows, the *long* open radial cell, and by the larger abdominal petiole.

Acanthaegilips braziliensis sp. n. ♀.—Length 2.4 mm. Black, shining; antennae and legs brownish-yellow, anterior and middle femora, except at base and apex, brown, hind coxæ and femora, except at apex, and hind tibiae, except at base, black; wings hyaline, the veins brown.

The head is perfectly smooth, highly polished; mandibles brownish-yellow, 3-dentate, the teeth black; antennae longer than the body, slightly thickened at apex, 13-jointed, the scape long, obclavate, as long as the second flagellar joint, the first flagellar joint being as long as the pedicel and scape united, the following joints to penultimate gradually shortening, the last joint as long as the two preceding united. Mesonotum coarsely irregularly rugose, without furrows. Scutellum produced into a long erect acute spine the length of the mesonotum. Metanotum rugose with the pleura pubescent. Marginal vein long, open along the fore margin, the second abscissa of radius twice the length of first. Abdomen subglobose, polished, the petiole smooth.

Hab. — Chapada, Brazil.

Subfamily viii CYNIPINÆ.

PHYLLOTERAS gen. nov.

This genus is based upon *Biorrhiza rubinus* Gillette, which is quite distinct from *Biorrhiza*

Westwood, in having 13-jointed, *not* 14-jointed antennae, and by having only faint traces of parapsidal furrows.

It comes, however, quite close to the agamous female of *Trigonaspis* Hartig, but the scutellum is rounded, with indications of foveae on either side at base, and without a rim at apex. In *Trigonaspis*, the scutellum is semicircular, without foveae at base and bounded by a delicate rim posteriorly.

In *Phylloteras* the frons is shagreened or coriaceous, the mesonotum subopaque or alutaceous, the antennae rather short, the third joint a little longer than the fourth, joints 9 to 12 twice as long as thick, while the claws of hind tarsi have a tooth at base within. In *Trigonaspis* the frons is smooth, shining, or at the most feebly alutaceous, the mesonotum polished, the antennae with the third joint almost twice as long as the fourth, joints 7 to 12 being scarcely longer than thick, while the claws of hind tarsi are simple, without a tooth.

SPIHAEROTERAS gen. nov.

This genus is based upon *Biorrhiza mellea* Ashm., which differs from the true *Biorrhiza* in having no carina on the frons between the antennae, in having only 13-jointed antennae, by the scutellum being rounded, and finally by the hind tarsi being much shorter than the tibiae, the claws having a more or less distinct tooth beneath at base.

In *Biorrhiza* the scutellum is lunate or semicircular, the frons carinate, the hind tarsi as long as their tibiae, while the claws are simple.

TRICHOTERAS gen. nov.

In this genus the antennae are only 12-jointed, the third joint being a little shorter and thicker than the fourth, but of an equal

length with the fifth; joints 6-8 become gradually shorter and shorter, joints 8 to 11 being only a little longer than thick, the 12th or last joint oblong, as long as 10 and 11 united. The head and thorax are closely punctate, opaque, and very hairy, the disk of the mesopleura alone polished and bare; the scutellum is cushion-shaped, a little longer than wide, with two smooth, lunate foveae at base; hind tarsi not longer than their tibiae, the claws with a tooth at base beneath.

Trichoteras coquilletti sp. n. Galls.— Small, brown, subopaque, globular galls, averaging from 6 to 8 mm. in diameter, and internally with a central kernel or larval cell held in place by radiating filaments.

These galls were collected by Mr. D. W. Coquillett, at Los Angeles, Cal., from the upper surface of the leaves of an unknown oak, who forwarded them to the Department of Agriculture, where three specimens of the gall wasp were reared. Structurally and in general appearance the galls very closely resemble *Dryophanta folita* Bass., but the subapterous wasp is quite different from that species.

Gall-wasp. Agamous, ♀. Length 2.5 mm. Head and thorax ferruginous, closely punctate, and very hairy; prosternum and pleura blackish; legs fusco-piceous, the articulations paler.

Antennae 12-jointed, shorter than the body, the scape fully as long as the first joint of flagellum, obconical, and much stouter, pedicel $1\frac{1}{2}$ times as long as thick; second joint of flagellum distinctly longer than either the first or third joint; fourth joint of flagellum a little shorter than the third, the fifth and following joints gradually shortening, the penultimate joint being scarcely longer than thick, the last joint fully as long as the first joint of flagellum, or twice as long as the penultimate. Wings abbreviated, narrowed and not extending beyond tip of abdomen, the veins dark brown, the marginal cell open, the areolet indicated by the union of the surrounding nervures.

Abdomen black, polished, pubescent along the sides towards base, and as long as the head and thorax together, compressed, and viewed from the side it is as broad as long, the hypopygium armed at tip with a long spine.

Hab. — Los Angeles, California.

Type, No. 3498, U. S. N. M.

Described from 3 ♀ specimens, bred Nov. 26 and 29, and Dec. 6, 1892.

AULACIDEA gen. nov.

The type of this genus is *Aulax mulgidiicola* Ashm., and to it belong all the N. A. species recently described under the genus Aulax. From *Aulax* Hartig (*sens. str.*) it is readily separated by the closed marginal cell. It is intermediate between *Aulax* Hartig, and *Phaenacis* Förster; from the former, it is at once separated by the character already referred to — the closed marginal cell, while from the latter which also has a closed marginal cell, it differs in having the first abscissa of radius curved, the apical branch of the submarginal vein straight, the parapsidal furrows sharply defined, complete, the female with 13-14-jointed antennae, the third joint being shorter than the fourth or at least no longer. In *Phaenacis* the first abscissa of radius is almost straight, the apical branch of the submarginal vein curved, the parapsidal furrows incomplete or vaguely, indistinctly defined, while the female antennae has the third joint longer than the fourth.

GONASPIS gen. nov.

This genus is based upon *Diastrophus scutellaris* Gillette, and to it also belongs *D. potentillae* Bassett. It is at once separated from *Diastrophus* Hartig, by the shape of the scutellum which is much produced, in outline pyramidal, its tip projecting far over the metathorax, by the lower half of the mesopleura being coarsely sculptured, and by the antennae being 13-jointed in ♀, 14-jointed in ♂. In *Diastrophus* the ♀ has 14-jointed antennae, the ♂ 15-jointed antennae.

GILLETTEA gen. nov.

This interesting new genus of gall-making Cynipidae, which is dedicated to Prof. C. P. Gillette, one of our most industrious students of these insects, is based upon an undescribed species discovered by Prof. T. M. Holzinger, of Winona, Minnesota, living in pithy swellings on the leaf petiole of *Taraxacum dens-leonis*.

It comes very close to the European genus *Xestophanes* Förster, agreeing with it in having a smooth mesonotum, an open radial cell, with a distinct areolet, and well defined parapsidal furrows; but the antennae in both sexes are 14-jointed, the third joint being distinctly longer than the fourth, the scutellum is smooth or nearly smooth, while the metanotum has two parallel, widely separated median carinae. In *Xestophanes* the antennae are 13-jointed in the ♀, 15-jointed in the ♂, the scutellum rugulose, while the metathoracic carinae are not parallel and converge anteriorly.

Gillettea taraxaci sp. n. Galls. — Irregular, knotty-like, pithy swellings, occurring together and uniting and forming oblong, irregular galls along and surrounding the leaf-petiole of *Taraxacum dens-leonis*; average length from one-quarter of an inch to fully two inches.

Gall-wasp. ♀. Length 1.5mm. Polished black, shining; head above, disk of mesonotum and scutellum feebly, microscopically shagreened; face and sides of thorax more distinctly shagreened, subopaque; antennae brown-black, with tip of pedicel and first joint of flagellum honey-yellow; mandibles pale rufous with black teeth, bidentate; all coxae black, the femora brown-black, towards

apex as well as all tibiae and tarsi, honey-yellow, the tibiae medially as well as two or three terminal joints of tarsi, obfuscated; wings hyaline, the veins blackish.

Antennae 14-jointed, nearly as long as the body, filiform, the first joint of flagellum one-half longer than the second, the second about $3\frac{1}{2}$ times as long as thick, the following joints imperceptibly shortening, so that the penultimate is only half the length of the second, the last joint being about one-half longer than the preceding. Parapsidal furrows distinct, complete the middle lobe with a very vaguely defined median longitudinal line, and on either side anteriorly two short vaguely impressed lines, which are only visible in certain lights. Scutellum with two narrow oblique foveae at base. Wings with a short but distinct marginal cilia, the nervures distinct, black, the marginal cell about $2\frac{1}{2}$ times as long as broad at base; areolet small but distinct, triangular. Abdomen not longer than the thorax, polished black, the second segment (the first after the very short petiole) about one-half longer than the third, the fourth and following very short, the hypopygium prominent, as seen from the side, triangularly acute.

♂. Length 1.1 mm. Agrees well with the female, except in the usual sexual differences, the antennae being slightly longer, the third joint honey-yellow only at base; all femora, except the anterior at tips, being black, while the marginal and costal cells are more or less confluent.

Hab. — Winona, Minn.

Types, No. 3499, U. S. National Museum.

Described from 1 ♂ and 2 ♀ specimens, bred March 31, 1896 by Prof. T. M. Holzinger.